

Vegetation Monitoring—Meeting 1 Notes
October 25-26, 2005
Whiskeytown NRA

Meeting Goals:

- (1) Determine monitoring objectives for the terrestrial vegetation vital sign.
- (2) Discuss monitoring constraints and potential for integration.
- (3) Begin discussion of a sampling framework.

Attendees:

Daniel Sarr (KLMN)
Dennis Odion (KLMN)
Michael Murray (CRLA)
Michelle Cox (LAVO)
Stassia Samuels (REDW)

Tim Bradley (WHIS)
Jennifer Gibson (WHIS)
Gretchen Ring (WHIS)
Windy Bunn (WHIS)

Tuesday, October 25

Handouts: Klamath Network Vital Signs Objectives Draft 1 (D. Sarr)
 Guidelines for long-term monitoring protocols (Oakley et al 2003)

Daniel began the meeting by going over where we are and where we're going in the vital signs process and began with discussion of his draft monitoring objectives for terrestrial vegetation.

Jennifer suggested that we take a step back and first specify our goals for monitoring vegetation. The group agreed and Dennis asked whether the group wanted the monitoring goals and objectives to be stressor based or not. The group decided to focus on perceived current and future stressors as a basis for determining objectives.

Discussion continued on what types of stressors might/are affect(ing) vegetation in the parks and what systems we're considering when we talk about terrestrial vegetation (lists recorded in Daniel's Excel file). During this discussion some preliminary monitoring goals were developed that will most likely apply to all vital signs monitoring and these were related to perceived management goals (lists recorded in Daniel's Excel file).

Discussion continued on the stressor based approach with Dennis noting that in order to determine the effects of stressors we will need some sort of "reference" site. The idea of was debated some with points being made that the systems were too variable and true references/controls would not be feasible. The idea of just using the first year as a baseline to measure long-term trends was brought up by Stassia. All agreed that long-term changes from a baseline are the most feasible to measure.

At this point, rough hypotheses were developed to elucidate the expected effects of the identified stressors (recorded in Daniel's Excel file). Then the meeting was adjourned for the day.

Wednesday, October 26

Handouts: Guidance for Designing an Integrated Monitoring Program (National I & M)

The day began with a review of our progress from yesterday and a discussion on which stressors are most concerning to the parks. Jennifer suggested that we revisit the idea of stressor based sampling, and noted that the I & M program should probably focus on the bigger landscape scale rather than locating plots based on perceived stressors. Stassia agreed that the plots should not be located based on a particular stressor but that the stressors may be picked up in the plots. The group agreed to abandon the idea of stressor based monitoring.

The group then prioritized the perceived stressors (recorded in Daniel's Excel file) by park in order to help frame monitoring objectives and strategies. Discussion turned back to Daniel's draft monitoring objectives with the following comments on each objective:

Draft monitoring objectives

1. Determine long-term trends in species composition and community structure (e.g., cover, density by height class of woody species) of selected focal plant communities.
2. Determine long-term trends in the distribution and abundance of plant species of special management interest in selected areas of KLMN parks.
3. Determine annual variation in recruitment and mortality for selected populations of long-lived perennial plant species of special management interest.
4. Where possible, document and record major forms of disturbance affecting focal plant communities.

Group discussion

1. This objective is good with everyone, but the words "long-term" were struck and the "selected focal plant communities" phrase was changed to "terrestrial vegetation". These changes were based on a decision by the group to design a sampling scheme that is based on factors other than "defined" plant communities.
2. This objective was controversial with discussion centering around whether we would need to design a sampling scheme that would capture distribution and

- abundance and whether we should include it as an objective if we didn't design the protocols around it. Discussion on this goal was tabled until the next meeting.
3. This objective was determined to be a part of Objective 1 and was struck.
 4. This objective was kept with the qualifier "where possible". It was determined that the sampling scheme would not be based around disturbance, but would try to capture it if possible.
 5. This objective was dropped because it is too specific and included in Objective 1.

The agreed upon objectives are:

- Determine trends in composition and community structure and fuels of terrestrial vegetation.
- Where possible, document major forms of disturbance affecting plant communities.
- Make program adaptive, if possible.

The rest of the meeting was spent discussing monitoring constraints and integration. Monetary constraints were discussed with Tim noting that the expected budget is similar to that of the fire effects crew. He estimated that a maximum of 100 plots could be read in a year with about 6 employees. Discussion continued on how to allocate the money and the crews, but no decisions were made.

Suggestions were made for co-locating appropriate monitoring plots for various vital signs (e.g. bird counts and vegetation). Tim suggested that we determine whether some of the variables are already being collected in plots in the parks and that we could lay the new sampling plots over existing plots, if possible. Discussion continued on integration with the fire effects program and with protocols being used by neighboring land owners. The group agreed that it is a good idea to integrate with neighboring land owners, but integrating with the national I & M program was less of a priority.

Next Meeting:

Tentatively scheduled for Dec. 12-13 before the annual KLMN meeting in Ashland.

Assignments:

Dennis/Daniel—work on the list of issues to research that was recorded in Daniel's Excel file.

Park Representatives—make a list of on-going vegetation monitoring in your park and surrounding lands. Send Dennis a list of vegetation types in the park and approximate acres in each type.